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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/743,343

Applicant(s)

RAIYANI ET AL.

Examiner

DANA AMSDELL

Art Unit

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-64, 69-77, 82-90, 95 and 96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-64, 69-77, 82-90, 95 and 96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Claim Rejection – 35U.S.C. §102

1. Applicant's remarks with respect to amended claims 58, 71 and 84, and the claims depending from them, have been considered but are moot in view of the new ground(s) of rejection. As the amendments take the claims in new directions, a new scope of examination is merited.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 58-61, 69-74, 82-87 and 95-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boatwright et al. (US 7,580,395), herein "Boatwright"; in view of "Official Notice".

4. Referring to Claims 58, 71 and 84, directed to the same, Boatwright teaches:

- one or more mobile devices (column 2, lines 15-21 –'portable hand-held device');
- a computer-readable medium coupled to the one or more mobile device having instructions stored thereon which (Fig. 1, elm. 100; and column 3, lines 21-27), when executed, cause a single one of the mobile devices to perform operations comprising:
 - providing a multi-modal user interface on a mobile device, the multi-modal interface for assisting a warehouse worker in performing inventory management tasks (column 13, lines 5-14) in a warehouse that stores different items for sale in multiple storage locations disposed throughout the warehouse (column 1, lines 35-36 and lines 59-60 referencing background art disclosing the warehouse; and the warehouse being embraced by "all" locations), and the multi-modal interface enabling output and user input of information using both first and second modalities that collectively include a voice-based modality and a touch-based modality (column 6, lines 46-50 - voice-based; and column 4, lines 10-15 – touch-based; and column 3, lines 39-50 - collectively)
 - transmitting information identifying the user-selected job type mode to an inventory management system (column 13, line10), in a single format which is consistent with the modality in which the first user input was received (Fig. 1/Fig.2; and column 3, lines 19-27),
 - responsive to transmitting the information, receiving a response to the information identifying the user-selected job type mode from the inventory

management system, in two or more formats which are consistent with both the first modality and the second modality (Fig. 10; and column 12, line 44 – column 13 line 14) , the response identifying a location at which [the] warehouse worker will perform a function related to the user-selected job type mode on the one or more items, a description of the one or more items, and a best route from a present location of the warehouse worker to the particular storage location (column 3, line 64 – column 4, line 20; and column 6, lines 46-55 (GPS teaches location and route, and digital imager provides optical ‘description’, or, item description is ‘keyed’ in with key pad; or described verbally through voice call)),

- providing the response to the warehouse worker using both audio and display components of the multi-modal user interface ", in the two or more formats which are consistent with both the first modality and the second modality (Fig. 2, elm. 200; column 9, lines 55-60 - ‘display’; Fig. 2, elm. 236; column 9, lines 12-17 – “speakers),
- transmitting information indicating that warehouse worker has completed the selected function related to the user-selected job type mode to the inventory management system, in a single format consistent with the modality in which the second user input was received (column 2, line 66 – column 3, line 7).

Boatwright teaches a system that functional facilitates the following features as well as teaching the general application to inventory management as cited above.

However Boatwright is not specific to these features:

- receiving a first user input identifying a job type mode, the first user input being input by the warehouse worker using either the first modality or the second modality as chosen by the warehouse worker, and the job type mode being a picking mode in which the warehouse worker removes the one or more items from the particular storage location receiving a second user input using either the first modality or the second modality as chosen by the warehouse worker, the second user input indicating that [the] warehouse worker has completed the selected function, and including count information or location information associated with the one or more items as observed by the warehouse worker and, when the voice-based modality is used, a phonetically distinct checkword associated with and displayed at the particular storage location, the phonetically distinct checkword indicating completion of the selected function,
- updating inventory data for the one or more items based on the count information or the location information, the updated inventory data being accessible using the two or more formats which are consistent with both the first modality and the second modality,
- determining that the particular storage location is expected to be empty,

- responsive to determining that the particular storage location is expected to be empty, prompting the warehouse worker to confirm that the particular storage location is observed to actually be empty, using both the first modality and the second modality.

However, Official Notice is taken that the steps recited as instructions stored on the computer readable medium (e.g. communication modality chosen at the workers discretion; conditional checkwork indicating completion status, such as "done" or "completed", as well as inventory updates with consistent mode of access, verified by on-site worker as prompted) are old and well known, albeit the standard way of inventory monitoring to ensure up to minute inventory levels for order fulfillment. The features of additional 'checks' with checkwords indicating "completed" status, and the reporting of 'observed' inventory over 'indicated' inventory are commonplace steps to provide assurance of accuracy of automated inventory systems and can not be made exclusive to any one system (please refer to citations in Conclusion). Therefore, it would be obvious to incorporate these features to the teachings of Boatwright as his system provides for comprehensive, perhaps redundant communication.

5. Referring to Claims 59, 72 and 85, Boatwright, with Official Notice teach the claims dependencies, and Boatwright further teaches wherein the operations further comprise outputting the updated inventory data in a format consistent with either the

first modality or the second modality, such that the inventory data is maintained during performance of the inventory management tasks (Fig. 2; and column 12, lines 63-68).

6. Referring to Claims 60, 73 and 86, Boatwright, with Official Notice teach the claims dependencies, and further teaches wherein the job type mode comprises job data (column 2, line 66 – column 3, line 7).

7. Referring to Claims 61, 74 and 87, Boatwright, with Official Notice teach the claims dependencies, and further teach wherein the multi-modal interface further enables output and user input information using a Radio Frequency Identification Device (RFID) modality, or a bar code modality (column 4, lines 15-20).

8. Referring to Claim 69 -70, 82-83, and 95-96, Boatwright, with Official Notice teach the claims dependencies, and Boatwright further teaches wherein the first user input is received using a different modality than the second user input; and wherein the first user input is received using the voice-based modality, and the second user input is received using the touch-based modality (Fig. 2, elms. 236/238 and elm. 202; column 12, lines 44-60).

9. Claims 62-64, 75-77, and 88-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boatwright with Official Notice as applied to claims 58, 71 and 84 above, and further in view of "2nd Official Notice".

10. Referring to Claims 62-64, 75-77, and 88-90, Boatwright, with Official Notice teach the claims dependencies, and Boatwright teaches wherein the operations further comprises receiving instructions and/or inventory information on a display (Fig. 8, elm. 802; column 2, line 66 – column 3, line 7; and column 13, lines 5-11). Boatwright also teaches using voice to communicate instructions and/or inventory information (Fig. 2, elm. 236/238). Official Notice is further taken that inventory instruction/information would necessarily include pick list, or a subset of the pick list identifying the one or more items. Boatwright and Official Notice do not expressly teach voice synthesis or the respective formats HTML and VXML. However, 2nd Official Notice is taken that it these formats are old and well known in the art of networked communication, and given Boatwright's teaching of networks in general, and internet access specifically (column 8, lines 19-27), one would find it obvious to include these formats are used to facilitate common communication network protocol.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- <http://web.archive.org/web/20030428064142/www.intellitrack.net/itwms.asp>
- Harris et al. (US 6331972)
- Shaffer et al. (US 2002/0107918)
- Francis et al. (US 6600418)

- McDonough et al. (US 2004/0049345)
- Bondarenko et al. (US 2004/0083479)
- Mountz (US 6748292)
- Scheurer (US 6866194)
- DeRemer et al. (US 6975914)
- Yoakum et al. (US 7035923)
- Petrovich et al. (US 7171378)

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANA AMSDELL whose telephone number is (571)270-5210. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. Ryan Zeender/
Supervisory Patent Examiner, Art Unit 3627